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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,726	05/18/2000	Geoffrey B. Rhoads	60195	9782

23735 7590 01/03/2005

DIGIMARC CORPORATION  
9405 SW GEMINI DRIVE  
BEAVERTON, OR 97008

EXAMINER
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AGWUMEZIE, CHARLES C

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

14

**Office Action Summary**

Application No.

09/574,726

Applicant(s)

RHOADS ET AL.

Examiner

Charlie C. Agwumezie

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05/18/00.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) 15-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 5/02/03.
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Election/Restrictions**

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-7, 11-14, 26-29 are drawn to an encode/decode digital source materials including a payment system, classified in class 705, subclass 77.

III. Claims 61-74 are drawn to a music database that can receive/transfer ambient music via a cell phone.

11. Claims 15-60, 75-76 are drawn to an encoder/decoder a digital object including a watermark, classified in class 713, subclass 176.

IV. Claim 77-89, drawn to portable communication devices including sound waves, extraction of hidden data, classified in class 455, subclass 11.1

Inventions 1 -IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an electronic banking system which would not require watermarking, or a portable communication device, authentication or licensing to complete the transaction over the internet. Invention 11 has separate utility such as authentication for printed material that would not require a portable communication device to transport the printed material. Invention III has separate utility such as licensing of literature that does not require a watermark, or portable communication devices, or authentication. Finally

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invention IV has separate utility such as portable telephone apparatus that does not require watermarking or electronic banking system or licensing for the basic functionality of the apparatus. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Examiner notes that it would be a burden to search multiple inventions given their separate status in the art as noted above.

The requirement is deemed proper and therefore made FINAL.

Via the paper filed on May 20<sup>th</sup> 2004, the applicant has elected the examination of invention group I directed towards claims 1-7, 11-14, 26-29. Affirmation of this election must be made by applicant in replying to this Office action. Examiner agrees with the applicant that claims 8-10 was not assigned to any particular claim group. Examiner further agrees with the applicant the election of claims 26-29 as part of group 1 which has been elected.

Examiner, however respectfully disagree with applicant's assertion that claims in groups III and IV should be examined together along claims 50-60. These claims are properly classified in their groups and therefore no further consideration will be accorded to them. Claims 15-25, 30-89 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claims 1-14, 26-29 have been examined

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claim 1-14, 26-29** are rejected under 35 U.S.C. 102(b) as being anticipated by Rhoads U.S. Patent 5,862,260.
2. As per **claim 1**, Rhoads discloses a method comprising:
  - encoding digital source material to steganographically convey plural-bit auxiliary data (see fig 2 and 5, col. 3, lines 46-59);
  - passing the encoded source material to a destination through at least one intervening computer (fig. 27),
  - at said intervening computer, detecting encoded source material transmitted thereby (fig 8, col. 26, lines 20-20); and
  - crediting a payment in response to said detection of the encoded source material, in accordance with the plural-bit auxiliary data steganographically conveyed by the encoded source material (col. 90 , line 65+, col. 91, lines 10-10).

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3. As per **claim 2**, Rhoads further discloses the method which includes decoding plural-bit auxiliary data only from source material that has first been tested to indicate the likely presence of such auxiliary data therein (Col. 26, lines 15-25).

4. As per **claim 3**, Rhoads further discloses the method which includes testing source material by reference to an encoding attribute that is supplemental to said encoded plural-bit auxiliary data (col. 16, lines 50-55).

5. As per **claim 4**, Rhoads further discloses the method in which said attribute is the presence of a characteristic signature signal conveyed by said source material (fig 24, col. 3, lines 47-55).

6. As per **claim 5**, Rhoads further discloses the method in which the signature signal is a repetitive noise burst signal (see fig 9C, col. 28, lines 24-40).

7. As per **claim 6**, Rhoads further discloses the method in which said transmitting includes distributing through a network of interconnected computers (see figs. 26 and 27).

8. As per **claim 7**, Rhoads further discloses the method of reporting said detection to a location remote from detection (); and crediting royalties based on detection (col. 90, lines 65+, col. 91, lines 1-10).

9. As per **claim 8**, Rhodes discloses a method comprising:  
presenting audio source material to a consumer (fig. 27, col. 1, lines 35-40), the material being encoded steganographically to convey plural-bit auxiliary data (fig 17, col. 1, line 40);  
decoding the audio source material that is presented to the consumer to decode the auxiliary data therefrom (fig 40); and  
using the plural-bit auxiliary data to retrieve information about the source material from a remote location (col. 1, lines 42-45)

10. As per **claim 9**, Rhoads further discloses the method that includes:  
storing data indicating the audio source material(s) presented to the consumer (col. 1, lines 35-40);  
generating a report based on the stored data (col. 1, lines 43-45),  
indicating the audio source material(s) presented to the consumer (col. 1, lines 44+).

11. As per **claim 10**, Rhoads further discloses the method which includes detecting the presented audio source material with a microphone, and decoding the auxiliary data from a microphone output signal (col. 27, lines 37-44, col. 80, lines 13-17).

12. As per **claim 11**, Rhoads discloses a method comprising:

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receiving an object steganographically encoded with plural-bit auxiliary data (fig 17, 26 and 39, col. 62, lines 52-59, col. 56, lines 58-62);

decoding the plural-bit auxiliary data from the object (fig 26 and 40, col. 54, lines 1-5);

consulting a registry to determine a proprietor of the object (col. 26, lines 45-55), by reference to said decoded plural-bit auxiliary data (fig. 38, col. 90, lines 60-67+); and

making a payment to said proprietor (col. 26, lines 57-62, col. 52, lines 65+).

13. As per **claim 12**, Rhoads further discloses the method that includes making said payment through the registry (col. 26, lines 57-62).

14. As per **claim 13**, Rhoads further discloses the method in which the object is a work of authorship, and the encoding adds a generally imperceptible level of noise to the object as it is perceived by a consumer thereof (col. 61, lines 18-29).

15. As per **claim 14**, Rhoads further discloses the method in which the registry comprises a database accessible through the internet (col. 91 1-10).

16. As per **claim 26**, Rhoads discloses a method of altering music data to steganographically insert plural bits of watermark data therein (fig. 39),



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characterized by inserting a first group of said bits for benefit of an end-user of the music data (fig39, col. 52, lines 61-63), inserting a second group of bits different than the first for benefit of an artist whose music is encoded by said music data (col. 52, lines 63-65 and inserting a third group of bits different than the first two for benefit of a distributor of the music data (col. 52, lines 65+).

17. As per **claim 27**, Rhoads further discloses the method in which the first group of bits represents an internet address of a web site that may be accessed by end-users of the music data (fig 27, ).

18. As per **claim 28**, Rhoads further discloses the method in which the second group of bits includes bits representing a unique identifier for the music data (col. 92, lines 20-25), permitting machine identification of the data and royalty credit to the artist (col. 90, lines 62-67, col. 91, lines 1-10)

19. As per **claim 29**, Rhoads further discloses the method in which the third group of bits represents usage restrictions to which audio appliances are responsive, thereby driving distribution of additional copies of the music data ().

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited to Rhoads U.S. Patent 5,768,426;

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6,675,146 and Rhoads U.S. Patent Application Publication U.S. 2004/0022444 are documents considered relevant to the claimed invention.

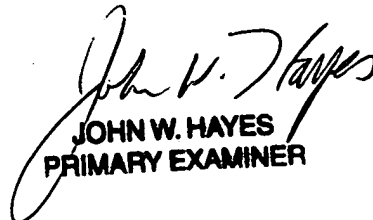
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Agwumezie whose number is (703) 305-0586. The examiner can normally be reached on Monday – Friday 8:00 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (703) 305 – 9768. The fax phone number for the organization where the application or proceeding is assigned is (703) 305-7687.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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December 23, 04

  
JOHN W. HAYES  
PRIMARY EXAMINER